Idaho Grade 5

## FlyBy Math<sup>TM</sup> Alignment Idaho Achievement Standards Mathematics 2-1-06

### **Standard 1: Number and Operation**

#### Goal 1.1: Understand and use numbers.

Objective(s)

Objective(s)

Objective(s)

Objective(s)

## **5.M.1.1.7** Select strategies appropriate for solving a problem.

#### FlyBy Math<sup>TM</sup> Activities

- --Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.
- --Use tables, graphs, and equations to solve aircraft conflict problems.
- --Compare predictions, calculations, and experimental evidence for several aircraft conflict problems.

#### **Goal 1.2: Perform computations accurately**

### **5.M.1.2.7** Use a variety of strategies to solve real life problems. (308.01 a)

#### FlyBy Math<sup>TM</sup> Activities

- --Use tables, graphs, and equations to solve aircraft conflict problems.
- --Use the distance-rate-time formula to predict and analyze aircraft conflicts.

#### Goal 1.3: Estimate and judge reasonableness of results.

F.M.1.2.F. Formulate conjectures and discuss why the
<b>5.M.1.3.1</b> Estimate to predict computation results. (307.03 a)

#### FlyBy Math<sup>™</sup> Activities

- --Predict outcomes and explain results of mathematical models and experiments.
- **5.M.1.3.5** Formulate conjectures and discuss why they must be or seem to be true. (308.02c)
- --Predict outcomes and explain results of mathematical models and experiments.

#### Standard 2: Concepts and Principles of Measurement

#### Goal 2.1: Understand and use customary and metric measurements.

# **5.M.2.1.1** Select and use appropriate units and tools to make formal measurements of length, templerature, weight, and volume (capacity) in both systems. (309.01.a)

#### FlyBy Math<sup>™</sup> Activities

--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

<b>5.M.2.1.2</b> Estimate length, time, weight, temperature, and volume (capacity) in real-world problems using standard units. (309.01.b)	Predict outcomes and explain results of mathematical models and experimentsCompare predictions, calculations, and experimental evidence for several aircraft conflict problems.
<b>5.M.2.1.4</b> Solve problems related to elapsed time. (309.01.d)	Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Standard 3: Concepts and Language of Algebra and Functions		
Goal 3.6: Apply functions to a variety of prob	olems.	
Objective(s)	FlyBy Math <sup>TM</sup> Activities	
<b>5.M.3.6.1</b> Use patterns to represent problems. (313.02.a)	Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.	

Standard 4: Concepts and Principles of Geometry			
Goal 4.3: Apply graphing in two dimensions.			
Objective(s)	FlyBy Math <sup>TM</sup> Activities		
<b>5.M.4.3.1</b> Use ordered pairs to identify and plot points in the first quadrant on a coordinate grid. (311.02.a)	Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.		
Standard 5: Data Analysis, Probability, and Statistics			
Goal 5.1: Understand data analysis			

Standard 5: Data Analysis, Probability, and Statistics		
oal 5.1: Understand data analysis.		
Objective(s)	FlyBy Math <sup>TM</sup> Activities	
<b>5.M.5.1.1</b> Read and interpret tables, charts, bar graphs, and line graphs. (312.01.a)	Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system. Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.	
Goal 5.2: Collect, organize, and display data.		
Objective(s)	FlyBy Math <sup>™</sup> Activities	
<b>5.M.5.2.1</b> Collect, organize, and display the data with appropriate notation in tables, charts, bar graphs, and line graphs. (312.02.a)	Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.	
	Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.	

Goal 5.5: Make predictions or decisions based on data.	
Objective(s)	FlyBy Math <sup>TM</sup> Activities
<b>5.M.5.5.1</b> Make predictions and decisions based on information. (308.01.c)	Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.